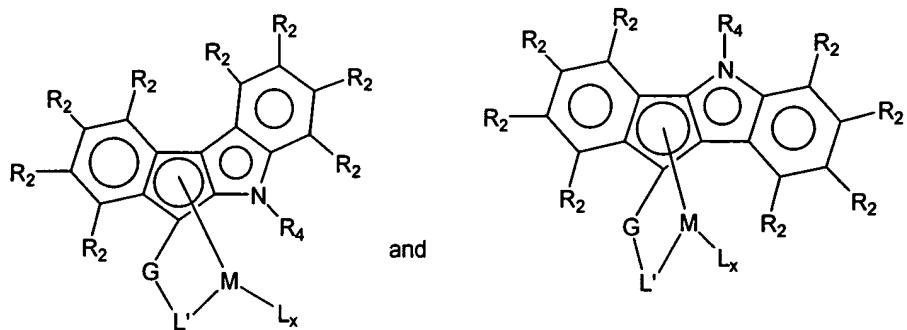


IN THE CLAIMS:

1-11. (canceled).

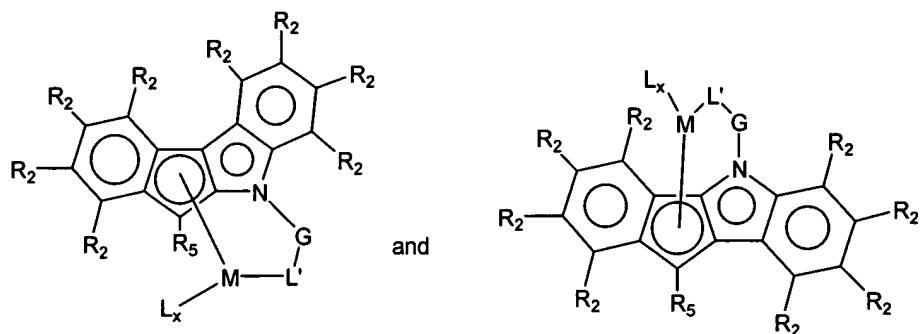
12. (currently amended): A process which comprises polymerizing an olefin in the presence of an activator, an organometallic complex, and an aluminum phosphate support, wherein the complex comprises a Group 3 to 10 transition metal, M, and at least one indenoindolyl ligand that is bonded to M, wherein the aluminum phosphate has a phosphorus to aluminum molar ratio of about 0.8:1 to about 1.1:1 and The process of claim 6 wherein the organometallic complex has a structure selected from the group consisting of:



wherein M is a Group 3 to 10 transition metal; each L is independently selected from the group consisting of halide, alkoxy, aryloxy, siloxy, alkylamino, and C₁-C₃₀ hydrocarbyl; L' is selected from the group consisting of alkylamido, substituted or unsubstituted cyclopentadienyl, fluorenyl, indenyl, boraaryl, pyrrolyl, azaborolinyl, and indenoindolyl; x satisfies the valence of M; R₄ is selected from the group consisting of C₁-C₃₀ hydrocarbyl, dialkylboryl and trialkylsilyl; each R₂ is independently selected from the group consisting of C₁-C₃₀ hydrocarbyl, H, F, Cl and Br; G is a divalent radical selected from the group consisting of hydrocarbyl and heteroatom containing alkylene radicals, diorganosilyl radicals, diorganogermanium radicals, and diorganotin radicals.

13. (original): The process of claim 12 wherein L' is selected from the group consisting of substituted or unsubstituted cyclopentadienyl, fluorenyl, indenyl, and indenoindolyl.

14. (currently amended): A process which comprises polymerizing an olefin in the presence of an activator, an organometallic complex, and an aluminum phosphate support, wherein the complex comprises a Group 3 to 10 transition metal, M, and at least one indenoindolyl ligand that is bonded to M, wherein the aluminum phosphate has a phosphorus to aluminum molar ratio of about 0.8:1 to about 1.1:1 and The process of claim 6 wherein the organometallic complex has a structure selected from the group consisting of:

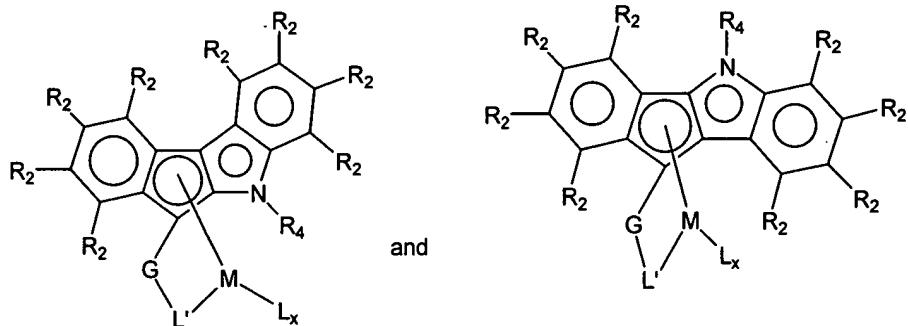


wherein M is a Group 3 to 10 transition metal; each L is independently selected from the group consisting of halide, alkoxy, aryloxy, siloxy, alkylamino, and C₁-C₃₀ hydrocarbyl; L' is selected from the group consisting of alkylamido, substituted or unsubstituted cyclopentadienyl, fluorenyl, indenyl, boraaryl, pyrrolyl, azaborolinyl, and indenoindolyl; x satisfies the valence of M; R₅ is selected from the group consisting of C₁-C₃₀ hydrocarbyl and H; each R₂ is independently selected from the group consisting of C₁-C₃₀ hydrocarbyl, H, F, Cl and Br; G is a divalent radical selected from the group consisting of hydrocarbyl and heteroatom containing alkylene radicals, diorganosilyl radicals, diorganogermanium radicals, and diorganotin radicals.

15. (original): The process of claim 14 wherein L' is selected from the group consisting of substituted or unsubstituted cyclopentadienyl, fluorenyl, indenyl, and indenoindolyl.

16-18. (canceled).

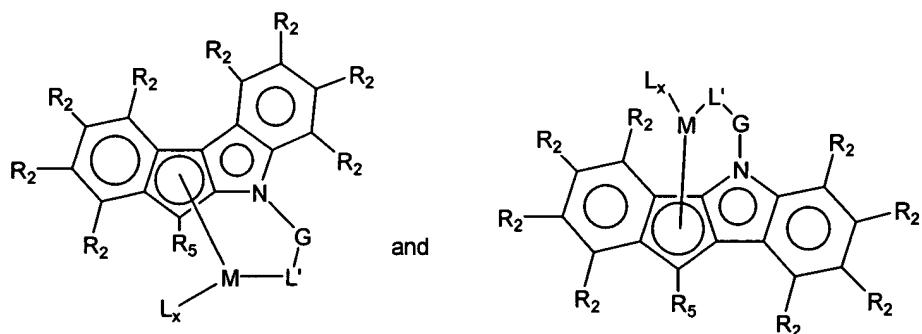
19. (currently amended): A process which comprises polymerizing an olefin in the presence of an activator, an organometallic complex, and an aluminum phosphate support, wherein the complex comprises a Group 3 to 10 transition metal, M, and at least one indenoindolyl ligand that is bonded to M, wherein the aluminum phosphate has a surface area of from about 50 to about 250 m²/gram and ~~The process of claim 7 wherein the organometallic complex has a structure selected from the group consisting of:~~



wherein M is a Group 3 to 10 transition metal; each L is independently selected from the group consisting of halide, alkoxy, aryloxy, siloxy, alkylamino, and C₁-C₃₀ hydrocarbyl; L' is selected from the group consisting of alkylamido, substituted or unsubstituted cyclopentadienyl, fluorenyl, indenyl, boraaryl, pyrrolyl, azaborolinyl, and indenoindolyl; x satisfies the valence of M; R₄ is selected from the group consisting of C₁-C₃₀ hydrocarbyl, dialkylboryl and trialkylsilyl; each R₂ is independently selected from the group consisting of C₁-C₃₀ hydrocarbyl, H, F, Cl and Br; G is a divalent radical selected from the group consisting of hydrocarbyl and heteroatom containing alkylene radicals, diorganosilyl radicals, diorganogermanium radicals, and diorganotin radicals.

20. (previously presented): The process of claim 19 wherein L' is selected from the group consisting of substituted or unsubstituted cyclopentadienyl, fluorenyl, indenyl, and indenoindolyl.

21. (currently amended): A process which comprises polymerizing an olefin in the presence of an activator, an organometallic complex, and an aluminum phosphate support, wherein the complex comprises a Group 3 to 10 transition metal, M, and at least one indenoindolyl ligand that is bonded to M, wherein the aluminum phosphate has a surface area of from about 50 to about 250 m²/gram and ~~The process of claim 7 wherein the organometallic complex has a structure selected from the group consisting of:~~



wherein M is a Group 3 to 10 transition metal; each L is independently selected from the group consisting of halide, alkoxy, aryloxy, siloxy, alkylamino, and C₁-C₃₀ hydrocarbyl; L' is selected from the group consisting of alkylamido, substituted or unsubstituted cyclopentadienyl, fluorenyl, indenyl, boraaryl, pyrrolyl, azaborolinyl, and indenoindolyl; x satisfies the valence of M; R₅ is selected from the group consisting of C₁-C₃₀ hydrocarbyl and H; each R₂ is independently selected from the group consisting of C₁-C₃₀ hydrocarbyl, H, F, Cl and Br; G is a divalent radical selected from the group consisting of hydrocarbyl and heteroatom containing alkylene radicals, diorganosilyl radicals, diorganogermanium radicals, and diorganotin radicals.

22. (previously presented): The process of claim 21 wherein L' is selected from the group consisting of substituted or unsubstituted cyclopentadienyl, fluorenyl, indenyl, and indenoindolyl.